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ABSTRACT

As policymakers consider whether and how to fill the expected revenue gap, they will need to be aware of the fiscal, legal, and political challenges ahead. The changing trends in the economy and population and their prospective impacts on state and local government budgets are the focus of this paper. Its goal is to help policymakers at all levels of government understand the potential impact of these economic and demographic changes on the ability of state and local government to finance public goods, in particular, to finance goods associated with children's welfare. Trends in the growth and composition of income, consumption, employment, and population, and forecasts of these economic and demographic indicators are described in the final section of this report. In the second section, the net impacts of these changes and forecasts of these variables are used to indicate the potential growth or decline in state and local revenue bases. In the final section, changes in state and local revenue structures are suggested that may capitalize on the changing economy. Data were derived primarily from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), and the Census Bureau. State and local governments will be faced with slower growing revenue sources, while public-service demand shifts toward the elderly. Without some fundamental changes to the major revenue instruments (income, sales, and property taxes), these trends will cause trouble for governments. However, preventing further erosion of these revenue bases and supporting expansion of the bases will put state and local governments on a higher revenue growth path without raising tax rates. State and local governments should also be encouraged to investigate further use of user fees and charges, as well as privatization of services. Appendices contain information about the Finance Project, available resources from the project's working-paper series, the BEA and Bureau of Census classifications of states, and an example of erosion of the U.S. income tax base. (Contains 48 references.) (LMI)

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THE EFFECTS OF ECONOMIC AND DEMOGRAPHIC CHANGES ON STATES AND LOCAL BUDGETS

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THE FINANCE PROJECT

EA 027 510

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THE EFFECTS OF ECONOMIC AND DEMOGRAPHIC CHANGES ON STATES AND LOCAL BUDGETS

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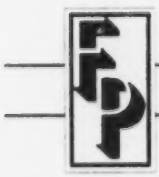

THE FINANCE PROJECT

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PREFACE

State and community leaders are under increasing pressure to improve their education, health and welfare systems. If Congress has its way, they will also play a larger role in designing, operating and paying for education and other supports and services for children and their families. The success of any efforts to reform these systems will be determined, in part, by the extent to which they are tied to sound revenue sources.

Most states are in the best financial shape they have been in for years.[1] Revenues and expenditures were higher than originally budgeted in most states during 1993 and 1994, and strong revenue growth has allowed some states to build reserves to their highest levels since 1980. Yet changing demographic and economic conditions, as well as a changing policy landscape, suggest that many states will face significant fiscal and budgetary challenges during the remainder of the decade and beyond. Expected reductions in federal funding will also create considerable pressures for state and local governments to change the way in which they fund education, health and welfare systems.

As policymakers consider whether and how to fill the expected revenue gap, they will need to be aware of the fiscal, legal and political challenges they can expect to face. Governors, legislators and other policymakers will need strategies to prevent the potential erosion of state tax bases due to a variety of economic and demographic changes including shifts in the composition of personal income and movements towards a more service-based economy. They can also be expected to craft legal provisions for dealing with new financing strategies, both those sparked by changes in state revenue bases and those initiated by the changes in the federal-state relationship. And state and local decisionmakers will need to consider not only the legally possible and economically desirable directions for revenue reform but also what is politically feasible in the current environment.

Against this backdrop, The Finance Project's Working Group on Strategies for Generating Revenue for Education and Other Children's Services has prepared a series of studies of systemic revenue generation issues for education and other children's services. It includes:

- *Issues and Challenges in State and Local Finance* -- an outline of the major challenges to raising state and local funds for education and other children's services, suggesting principles that should guide attempts to address these problems.
- *The Effects of Economic and Demographic Changes on State and Local Budgets* -- an analysis of the long-term economic and demographic trends that affect revenue generation, it highlights current and anticipated changes to the economic base and the implications of these changes for the overall mix of state government revenue sources, as well as the most promising sectors and activities for tax revenue growth.

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[1] National Conference of State Legislatures and National Association of Legislative Fiscal Officers, State Budget and Tax Actions 1995: Preliminary Report. Denver, CO: National Conference of State Legislatures, July 1995.

- *Legal Issues and Constraints Affecting Finance Reform for Education and Related Services* -- an examination of the federal and state constitutional and statutory issues that affect the capacity of governments to raise revenue for education and other children's services, including mandates and key legislation which limit revenues, expenditures, and borrowing.
- *Toward State Tax Reform: Lessons from State Tax Studies* -- a review and analysis of recent state tax commission recommendations in selected states which identifies critical factors to the success of state tax reform commissions, focusing on factors linked to the process of forming a commission and generating the necessary consensus to enact tough reforms.

Taken together these studies paint a vivid picture of the current fiscal context as well as the emerging fiscal and budgetary challenges that states and localities will face over the coming several years. They clarify a number of the critical policy and political issues that will confront governors, state legislatures, educators and others who run programs to serve children and their families. And they highlight a variety of options for reform that policymakers may pursue to improve public revenue generation for education and other children's services.

These papers are part of a larger series of working papers on salient issues related to financing for education and other children's services produced by The Finance Project. Some are developed by project staff; others are the products of efforts by outside researchers and analysts. Many are works in progress that will be revised and updated as new information becomes available. They reflect the views and interpretations of their authors. By making them available to a wider audience, the intent is to stimulate new thinking and induce a variety of public jurisdictions, private organizations, and individuals to examine the ideas and findings presented and use them to advance their own efforts to improve public financing strategies.

The Finance Project was established by a consortium of national foundations to improve the effectiveness, efficiency, and equity of public financing for education and an array of other community supports and services for children and their families. Over a three-year period that began in January 1994, the project is conducting an ambitious agenda of policy research and development activities, as well as policy-maker forums and public education. The aim is to increase knowledge and strengthen the capability of governments at all levels to implement strategies for generating and investing public resources that more closely match public priorities and more effectively support improved education and community systems.

Cheryl D. Hayes
Executive Director

INTRODUCTION

Economic and demographic changes over the last few decades as well as forecasts of continued change have signaled potentially stressful times for the financing of state and local governments. The changes in the composition of income toward transfer payments and retirement income mean less taxable income; the movement toward heavier consumption of services and medical products leads to less taxable sales in many states; the housing turnover due to demographic changes in some regions may mean smaller increases in property tax bases; and the changing composition of employment may lead to smaller increases in tax bases. All of this change comes at a time when state and local pressure from interstate and international competition forces state and local governments to remain competitive (which includes keeping taxes low), and when voters themselves remain in a particularly bad mood about taxes.

As state and local governments trying to remain competitive deal with tax bases that expand more slowly, public expenditures will be even more closely scrutinized. Funding for programs that benefit children and the non-elderly poor are likely to fare the worst under this scrutiny, because these groups have little or no political constituency. The aging of the population will mean more voting power for older citizens, while the competition "bogeyman" will protect infrastructure interests and keep taxes low.

The changing trends in the economy and population and their prospective impacts on state and local government budgets are the focus of this paper. Its goal is to help policymakers at all levels of government understand the potential impact of these economic and demographic changes on the ability of state and local governments to finance public goods, and, in particular, to finance goods associated with children's welfare.

Many of the trends discussed in this paper are natural consequences of the development of our economy and the aging of our population. Policy can do little to reverse or even bend these trends. However, by understanding how these trends may reduce the rate of growth in revenue collections and change the composition of client populations, policymakers might be able to redesign expenditure programs and revenue instruments to the advantage of state and local government finances.

Trends in the growth and composition of income, consumption, employment, and population, and forecasts of these economic and demographic indicators, are described in the first section of this report. The data presented are drawn primarily from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) and Census Bureau.[1] In the second

[1] Both groups provide historical data as well as projections of changes in income, age distribution, and the like through the year 2040 in many cases. These data provide the basis for discussing the impact of changing demographics on state and local revenue yields. As with any forecast or projection, data presented for years farther in the future are likely to be more questionable than those data presented for the next decade. This is due to both the basic methodology that is used to project the data, and the potential influence of unexpected economic and political changes. As such, while the very long-term projections are helpful in providing a flavor of expected trends, one should not concentrate as much on the specific numbers in these "out years."

section, the net impacts of these changes and forecasts of these variables are used to indicate the potential growth or decline in state and local revenue bases. In the final section, we suggest changes in state and local revenue structures that may capitalize on the changing economy.

The emphasis in this paper is on the impact of these changes on the ability of state and local governments to produce a stable revenue stream. It is obvious that these changes are important and that they will also impact the demand and cost of public services, but those effects are not examined here.

ECONOMIC AND DEMOGRAPHIC TRENDS

In the past years, state and local governments have been experiencing good times in their ability to finance expenditures. This has been due in large part to the general strength of the economy and some conservative behavior on the part of state and local legislatures.[2] Many forecasters predict that, overall, the economy will not experience any severe downturns, but will experience somewhat slower overall growth.

As seen in Table 1, both the Executive Branch and the Congressional Budget Office (CBO) project a relatively stable period of economic growth over the next six years, although at a relatively lower rate than in the most recent years. It is worth noting that both groups revised their forecasts of key economic indicators between January 1995 and June/August 1995 to reflect slightly lower rates of growth.[3] Changes in the forecasts included slight increases in expected unemployment rates (between 0.1 and 0.2 percentage points), lower real growth in GDP (between 0.1 and 0.5 percentage points each year), and slightly higher rates of inflation (0.1 to 0.2 percentage points per year). While these changes are relatively small, and the forecasts still attest to a general soundness of the economy, the adjustments that were made highlight the difficulties and uncertainty associated with forecasting, even over a short period of time.[4] These adjustments also demostrate a somewhat more conservative overall picture of the future of the economy.

However, while the general health of the economy has been relatively good in recent years, there have been significant changes in both the growth of a number of economic and demographic variables, as well as in the composition of these indicators—trends that are expected to continue for the next decade and beyond. In many cases, it is the changing composition and not simply the overall growth of items such as income, age, and employment that will have the greater impact on state and local budgets in the next decade.

In some ways, the general forecast of steady although somewhat slower growth in gross domestic product and total personal income masks the potential problems that exist due to the structural changes in the economies of states across the country. This section highlights

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[2] State Budget and Tax News (SB&TN) has reported that states have experienced strong revenue figures for the past two years. See SB&TN, June 5, 1995.

[3] These changes were made at the annual midsession review of the budget (conducted in June of 1995).

[4] For a comparison of the forecasts, see CBO (1995a, 1995b), and Executive Office of the President (1995a, 1995b).

TABLE 1

Calendar Year Administration and CBO Forecasts of Key Economic Indicators

	Actual	Forecast		Projected			
Administration							
	1994	1995	1996	1997	1998	1999	2000
Real GDP (billions)	5,344	5,495	5,622	5,762	5,906	6,054	6,205
Percentage Change in Real GDP	4.1%	2.8%	2.3%	2.5%	2.5%	2.5%	2.5%
Percentage Change in CPI-U	2.6%	3.0%	3.2%	3.2%	3.2%	3.1%	3.1%
Unemployment Rate	6.1%	5.8%	5.9%	5.8%	5.8%	5.8%	5.8%
91-day Treasury Bill	4.2%	5.7%	5.5%	5.5%	5.5%	5.5%	5.5%
Ten-Year Treasury Note	7.1%	6.6%	6.8%	7.0%	7.0%	7.0%	7.0%
CBO							
Real GDP (billions)	5,334	5,481	5,584	5,715	5,851	5,992	6,135
Percentage Change in Real GDP	4.1%	2.6%	1.9%	2.3%	2.4%	2.4%	2.4%
Percentage Change in CPI-U	2.6%	3.1%	3.4%	3.4%	3.3%	3.2%	3.2%
Unemployment Rate	6.1%	5.7%	6.0%	6.0%	6.0%	6.0%	6.0%
Three-Month Treasury Bill	4.2%	5.4%	5.1%	5.1%	5.1%	5.1%	5.1%
Ten-Year Treasury Note	7.1%	6.5%	6.4%	6.7%	6.7%	6.7%	6.7%

Source: Executive Office of the President (1995a) and Congressional Budget Office (1995a).

the past trends and forecasted changes in income, age distribution, employment, and consumption of the U.S. population and regions; it pays particular attention to the underlying changes in the composition of these variables.

Income

Income serves as one of the main indicators of the fiscal health of a country, region, or state. From a government finance perspective, growth in income is typically associated with growth in revenue bases, as well as increased demand for public services. While there are various measures of income, the one that is widely used in tracking the growth of an economy is personal income, and it is used here. The U.S. Department of Commerce, Bureau of Economic Analysis (BEA) defines personal income as the sum of wages and salaries, dividends, rents, interest, transfer payments, other labor income, and income of proprietors. The information presented in Box 1 provides a further breakdown of these income items.

The growth rate of real per capita personal income has declined somewhat over the last two decades. As seen in Box 2, the average annual real per capita growth in personal income fell by over 40 percent between the 1970s and 1980s. In the early years of the 1990s, real per capita personal income actually declined between 1990 and 1991 as a result of the most recent recession. While the economic recovery that began in mid-1991 pulled income growth up somewhat, the average growth rate from 1990 to 1993 is very low relative to the earlier years.

The BEA expects this positive real growth in overall personal income to continue at lower and lower rates throughout the next few decades. In the BEA forecast of personal income, nationwide growth in real per capita personal income is expected to hover at around

1.3 percent per year through the year 2000. Thereafter, the average annual growth rate will fall by approximately 23 percent by the year 2010, and fall another 23 percent through the year 2025 (see Box 2).

Not surprisingly, the expected growth in real per capita personal income among the regions is quite different from the national average. The BEA provides data on regional income differences, which are highlighted in Box 2. As seen there, while the states of the New England and Mideast regions showed relatively strong average annual growth in personal income from 1980 through 1990, these states are not expected to fare as well in the coming years. The states located in the Far West region are expected to see some future increase in real per capita income, although income growth in this region is expected to remain low relative to the other regions.

Relatively strong income growth over the next two decades is expected for the states in the Plains, Southeast, and Southwest regions.[5] All else held constant, we would expect that the states located in these regions would have an easier time meeting their expenditure demands, due to their relatively strong income growth forecasts. These regional trends in income directly reflect the relative growth in employment in these regions.

BOX 1

Composition of BEA Personal Income (1994, Billions of Dollars)

Sum of:	
Dividends, Interest, and Rent	$ 886.0
Transfer Payments	963.4
Wages and Salaries	3,279.0
Other Labor Income	381.0
Proprietors' Income	473.7
Less:	
Personal Contributions for Social Insurance	281.4
Equals:	
Total Personal Income	5,701.7

Source: BEA, June 1995.

[5] The BEA classification of states by region is explained in Appendix A.

BOX 2

Actual and Forecasted Average Annual Growth of Real Per Capita Personal Income U.S. and Regions: 1970-2025

Region	1970-80	1980-90	1990-93	1993-00	2000-05	2005-10	2010-25
United States	3.04%	1.80%	0.06%	1.31%	1.17%	1.01%	0.78%
New England	2.74%	3.04%	-0.36%	1.29%	1.11%	0.94%	0.70%
Mideast	2.31%	2.68%	0.03%	1.20%	1.11%	0.95%	0.73%
Great Lakes	2.78%	1.44%	0.43%	1.34%	1.19%	1.02%	0.78%
Plains	2.99%	1.76%	0.23%	1.50%	1.22%	1.04%	0.78%
Southeast	3.92%	2.20%	0.55%	1.46%	1.26%	1.08%	0.86%
Southwest	4.50%	0.65%	0.75%	1.41%	1.23%	1.07%	0.85%
Rocky Mountains	3.80%	0.93%	1.12%	1.36%	1.20%	1.04%	0.79%
Far West	3.23%	1.12%	-1.07%	1.21%	1.13%	0.99%	0.77%

Source: BEA, June 1995.

From the viewpoint of state and local finances, the forecasted positive growth in personal income may be viewed as a sound indicator of future fiscal health if the growth in personal income yields a similar growth in the tax base (whether this base is income or consumption). However, both the declining growth in personal income as well as the changes in the underlying pattern of income suggest that the growth in tax bases may not be keeping up with the overall growth in personal income.

The information presented in Figure 1 summarizes the changing composition of personal income nationwide.[6] As seen there, the largest share of personal income—wages and salaries—has declined in importance, while transfer payments have grown substantially between 1970 and 1993. If this increase in transfer payments comes at the expense of wage and salary income growth, it creates a tension for state and local finances, because transfer payments are largely untaxed, while wages comprise over 70 percent of state and local income tax bases.[7] Therefore, if wage and salary income grows more slowly, the income tax base grows more slowly, and, correspondingly, revenues from income taxes grow more slowly.

Transfer payments include transfers made by government and business, as well as payments to non-profit institutions.[8] The fastest-growing transfer sector has been transfer payments made by government. These include federal, state and local government payments for: retirement and disability insurance, medical programs, income maintenance benefits, unemployment insurance benefits, veterans' benefits, and others. Among these types of payments, the fastest-growing individual payments have been medical payments--largely

[6] In Figure 1, the left-hand vertical axis applies to wage and salary income only; the right-hand vertical axis applies to all other forms of income.

[7] This trend has been noted in a number of studies, including Duchi (1994), Snell (1993), and Mullins and Wallace (1992).

[8] Payments to non-profit institutions include payments by the federal, state, and local governments, as well as by businesses.

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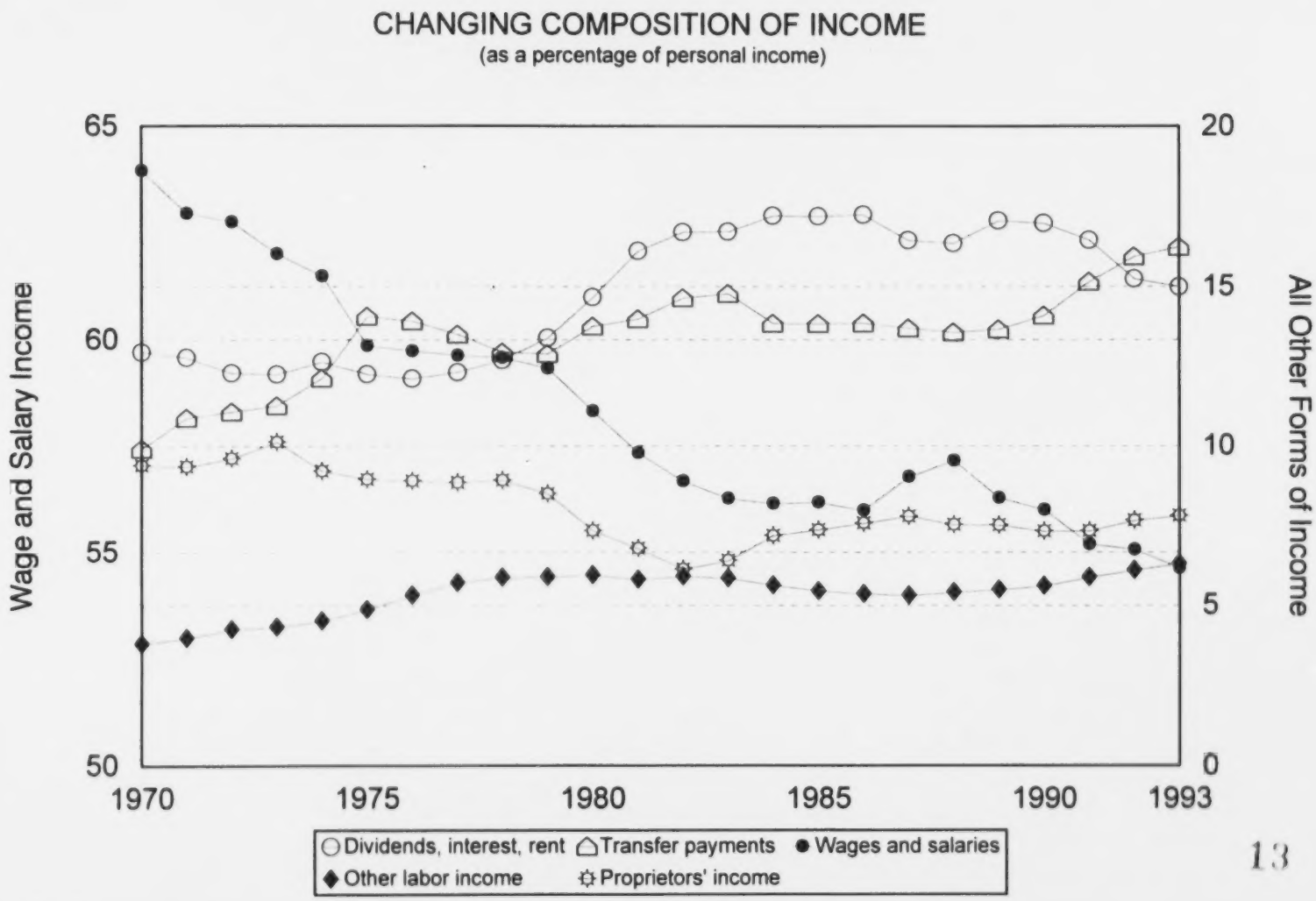
Figure 1



Source: BEA (1994)

those under the Medicaid and Medicare programs, and income maintenance benefits (AFDC, food stamps, and others).

Retirement and disability payments (including Social Security) still remain the largest share of government transfer payments, although these have fallen from about 54 percent of all government transfers in 1970 to 50 percent in 1993. At the same time, medical payments have risen from 17 percent of government transfers to 31 percent over the same time period (BEA, 1994b). Although the retirement income as a share of personal income has declined somewhat, government-sponsored retirement income is still projected to grow faster than wage and salary income (Ratajczak, 1995).

Employer contributions to private pension and welfare funds, employer payments for workers' compensation, and employer payments for private health insurance are included in other labor income (OLI). Other labor income has increased from about 4 percent of personal income in 1970 to about 6.2 percent in 1993. While it is still a relatively small share of personal income, this is another largely non-taxable income source and as such it is a factor in a potentially slower growing tax base for state and local governments.

This shift in income toward transfer payments holds special significance for state and local governments that impose income taxes. Of the 43 states that impose some form of an income tax, virtually all have exemptions for general retirement and/or Social Security income. Most states have practically eliminated the tax on Social Security income, in contrast to recent actions by the federal government to increase the amount of Social Security income subject to taxation.[9] Many states allow retirees to exempt some part of private pension income as well. In addition, some states offer other forms of elderly credits. Local governments that impose income taxes use a variety of income definitions, but few include any type of retirement or pension income in their tax base.[10] These actions by state governments reduce their taxable income base by larger amounts each year as retirement income grows.

We can make a rough estimate of the state income tax revenue loss associated with the taxation of Social Security income. The IRS estimates that $25 billion of Social Security income was included in federal adjusted gross income in 1993. If all states imposed an average tax rate of 4 percent on this income, this could increase state tax revenues by as much as $1 billion, or about 1 percent of all state income tax revenue in 1993. While this example is very rough, it does help to show the magnitude of the issue of taxation of retirement income. The cost to state and local governments becomes more pronounced when other pension income is also excluded from taxation, as it is in many states.

The net effect of this compositional change in personal income for state and local tax bases is that a smaller share of personal income will be subject to tax, as noted above. However, the growth rate of the taxable income base itself will ultimately impact the growth

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[9] The federal government currently subjects up to 85 percent of Social Security income to taxation. Prior to 1994, 50 percent was subject to taxation at the federal level. ACIR (1995) reprts that 8 states follow the federal Social Security exemption rules, 26 states fully exempt Social Security income, and the remainder use some alternative form of exemption.

[10] See ACIR (1995).

rate in tax revenue. The question of importance here is: While there is an unmistakable increase in the non-taxed share of personal income, is the taxable share itself growing any more slowly than it has in the past? In effect, it is the absolute level and growth of taxable income that is important.[11]

Forecasters generally expect that overall government transfer payments will continue to grow faster than wage and salary payments.[12] This growth is largely due to the aging of the population—which increases both retirement and medical payments—and the rising cost of medical care. Recent declines in the rate of growth in the medical price index may mitigate this trend somewhat. Congressional action to cut back on Medicare and Medicaid spending could also slow the growth in the health portion of transfer payments. However, as shown below, the aging of the population will remain an important factor in replacing the share of wage and salary income with retirement income.

What about the growth in taxable versus non-taxable sources of income beyond the next couple of years? The data in Table 2 help to qualify this point. Potential taxable income in the table is defined as total earnings plus capital income. Together, these comprise well over 90 percent of most state income tax bases (and nearly 100 percent of most local income tax bases).[13] For comparison purposes, the forecast of average annual real per capita transfer payments is also presented in Table 2. As seen there, in all regions, the average annual growth rate in real per capita transfer payments was much higher than the average annual growth in potential taxable income from 1979 to 1993, although most of this growth in transfer payments was concentrated in income maintenance and health payments in the early 1990s.

The future growth in potential taxable income is expected to be relatively strong through the year 2000 for most regions of the country, as shown in Table 2. However, for the states of New England and the Mideast regions, even the short-term projections suggest that taxable income growth will decline relative to the earlier period. The longer-term projections suggest that the growth in potential taxable income may decline in all regions, thereby reducing the growth in tax revenue in all regions of the country, unless tax rate or tax base changes are made. At the turn of the century, the average annual growth in this measure of potential income is expected to be about 75 percent of what it had been in the earlier period. The growth rate continues to decline, according to the BEA projections, such that within approximately 10 years, potential taxable income growth will be 40 percent less than it is currently. At the same time, growth in transfer payments will continue to increase.

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[11] However, if one believes that the demand for public expenditures increases about proportionately with increases in overall personal income, the reduction in the taxable share of personal income may imply a mismatch between the growth in revenue and the growth in the demand for public expenditures.

[12] For example, Ratajczak (1995) projects nominal growth in government transfer payments of 6.8 percent for 1994-1995 and 6.6 percent for 1995-1996, and 5.9 percent for each period for wage and salary growth.

[13] This was calculated using data from the IRS, *Statistics of Income* and individual states definitions of taxable income from ACIR (1995).

TABLE 2

Average Annual Growth in Real Per Capita Potential Taxable Income and Transfer Payments

Real Per Capita Potential Taxable Income					
	1979-1993	1993-2000	2000-2005	2005-2010	2010-2025
United States	0.93%	1.43%	1.08%	0.88%	0.52%
New England	1.68%	1.47%	1.05%	0.84%	0.49%
Mideast	1.45%	1.33%	1.05%	0.84%	0.48%
Great Lakes	0.59%	1.46%	1.09%	0.89%	0.52%
Plains	0.74%	1.61%	1.12%	0.91%	0.52%
Southeast	1.26%	1.58%	1.15%	0.93%	0.55%
Southwest	0.40%	1.48%	1.11%	0.92%	0.57%
Rocky Mountain	0.73%	1.47%	1.11%	0.93%	0.58%
Far West	0.39%	1.32%	1.06%	0.88%	0.54%
Real Per Capita Transfer Payments					
	1979-1993	1993-2000	2000-2005	2005-2010	2010-2025
United States	3.61%	0.75%	1.29%	1.68%	2.82%
New England	3.78%	0.48%	1.16%	1.56%	2.71%
Mideast	3.79%	0.57%	1.14%	1.55%	2.70%
Great Lakes	4.06%	0.82%	1.36%	1.73%	2.87%
Plains	3.81%	0.96%	1.38%	1.75%	2.89%
Southeast	3.80%	0.94%	1.41%	1.78%	2.91%
Southwest	3.94%	0.99%	1.45%	1.81%	2.95%
Rocky Mountain	3.59%	0.76%	1.37%	1.75%	2.88%
Far West	2.64%	0.70%	1.25%	1.65%	2.78%

Source: BEA , 1995.

In summary, the trends in the composition of income may continue to lower the elasticity of taxes based on income.[14] This is due to the projected decline in the growth in earnings after the year 2000. This means that state and local governments should expect these taxes to yield smaller increases in revenue over time unless they adjust their tax

[14] The elasticity of a tax is defined here as the percentage change in tax revenue for a 1 percent change in personal income. The elasticity is influenced by both the tax base and the tax rate.

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structures.[15] Continued state and local government decisions to exempt the growing forms of income (retirement income in particular) from their tax bases may make this problem worse over time. Additionally, heavy reliance on income taxes may place state and local governments in more stressful positions as they are forced to deal with slower-growing revenue.

Age Distribution

One of the most widely acknowledged and discussed trends in the area of demographics is the aging of the U.S. population.[16] As the "baby boom" period of the 1950s gave way to the "baby bust" starting in the late 1960s, the growth in the population fell, and the average age of the population of the nation has subsequently increased from 28 years in 1970 to 32.8 years in 1990 (U.S. Census Bureau, 1994). By all accounts, the aging of the U.S. population is expected to continue into the foreseeable future.

Overall growth of the U.S. population has remained relatively constant, slightly over 1 percent per year since 1973 (see Table 3). The Census Bureau's projections of population growth show a slight decline in the overall growth of the U.S. population through the year 2020. Regionally, the Census Bureau projects that the South and West regions will grow the fastest, while the Northeast and Midwest regions will experience more limited population growth.[17]

TABLE 3
Growth in Total U.S. Population

Year	Population (in thousands)	Average Annual Percentage Growth
1973	211,349	
1979	224,564	1.04%
1983	234,284	1.07%
1995	263,434	1.03%
1996	266,096	1.01%
1997	268,702	0.98%
1998	271,257	0.95%
1999	273,768	0.93%
2000	276,241	0.90%
2005	288,286	0.87%
2010	300,431	0.84%
2015	313,116	0.84%
2020	325,942	0.82%

Source: U.S. Department of Commerce, Bureau of the Census (1994).

[15] For example, tax rate increases and/or the elimination or reduction of exemptions could yield increased growth of tax revenue even as the growth of the tax base is decreasing.

[16] For example, see Mankiw and Weil (1989), and Morrison (1987).

[17] The Census Bureau's classification of states by region is found in Appendix B.

BOX 3

Population Projections By Region (in thousands)

Region	1995	2000	2010	2020
United States	263,434	276,241	300,431	325,942
Northeast	51,440	51,885	53,301	55,352
Midwest	61,994	63,867	66,332	68,984
South	91,726	97,241	107,385	117,498
West	58,273	63,277	73,412	84,109

Source: U.S. Department of Commerce, Bureau of the Census, 1994.

As with income, the general pattern of population growth should not raise any red flags regarding state and local governments' ability to fund public services. Instead, it is the underlying composition of the population that may create some areas of fiscal stress, particularly as state and local funding for children's issues is concerned. The data in Table 4 show the age distribution (estimated for 1995 and projected through 2020) as tabulated by the Census Bureau (1994). What becomes immediately obvious is the growing polarization of the population according to age. In the near future (1995-2005), those over the age of 75 are expected to be the fastest-increasing age group in the United States. Thereafter, the portion of the population 65 and older is expected to grow faster than the school-age population and the working-age population.

The strongest growth in school-age children is expected to come in the next five years, while the working-age population is expected to increase slowly throughout the forecasted period. In 1995, there were about 1.7 school-age children for each elderly person (aged 65 or older). In 2010, there will be 1.57 school-age children for each elderly person, and in 2020 this falls to 1.2 school-age children for every elderly person. Also in 1995, there were approximately 3.4 working-age adults for each elderly person; in 2010 this falls to 3.1, and in 2020 this falls again to 2.43.

These forecasted compositional changes in the age distribution of the population may have a number of serious repercussions for state and local budgets. First, the changing age distribution signals a potential change in popular demand for certain public services and financing mechanisms. Simple majority voting mechanics indicate that the elderly population will become increasingly influential at the voting booth, at the expense of working-age and younger populations. This will probably mean increases in spending for services preferred by the elderly, including health, hospital, and medical services, Social Security, transportation services, and some types of recreational services. Services which may be cut due to reduced advocacy include those targeted toward children: education, certain types of recreation, AFDC, and Medicaid.

Second, a growing elderly population is associated with changes in consumption patterns, which will in turn affect the revenues raised by state and local governments. As discussed below, consumption in the United States has increasingly moved toward services

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TABLE 4

U.S. Age Distribution (in thousands)

Year	5-19 years	25-54 years	65-74 years	75 and over
1995	55,845	114,045	18,963	14,685
2000	60,322	119,530	18,551	16,771
2005	62,112	121,085	18,624	18,346
2010	62,844	121,937	20,978	19,126
2015	62,749	121,504	25,733	20,099
2020	64,551	122,099	30,910	22,439

Average Annual Growth

Years	5-19 years	25-54 years	65-74 years	75 and over
1995-2000	1.60%	0.96%	-0.43%	2.84%
2000-2005	0.59%	0.26%	0.08%	1.88%
2005-2010	0.24%	0.14%	2.53%	0.85%
2010-2015	-0.03%	-0.07%	4.53%	1.02%
2105-2020	0.57%	0.10%	4.02%	2.33%

Source: U.S. Department of Commerce, Bureau of the Census, 1994.

BOX 4

Average Annual Growth in Age Distribution of the U.S. Population By Region

5-19 Years

Region	1995-2005	2005-2010
Northeast	0.81%	-0.36%
Midwest	0.51%	-0.17%
South	1.16%	0.30%
West	1.97%	0.95%

25-54 Years

Region	1995-2005	2005-2010
Northeast	-0.19%	-0.36%
Midwest	0.33%	-0.29%
South	0.86%	0.24%
West	1.25%	0.78%

65 Years and Older

Region	1995-2005	2005-2010
Northeast	0.04%	0.83%
Midwest	0.40%	0.95%
South	1.54%	2.11%
West	1.79%	2.64%

Source: U.S. Department of Commerce, Bureau of the Census, 1994.

and health and medical goods.[18] To some extent, this change in consumption patterns is associated with the graying of America. Many of these services and health-related goods are not included in state and local government sales tax bases. Thus, as the country ages and naturally shifts its consumption focus away from taxable goods toward non-taxables, the growth of the sales tax base is decreased, again reducing the monies available for public expenditures. This impact is likely to be very gradual, however, as the overall composition of the population changes.

Another important issue is that many local governments grant property tax credits and exemptions to elderly homeowners, thus reducing the revenue raised by the property tax. These preferences range from credits equal to a certain percentage of property taxes owed, to full-scale property tax exemptions for the elderly (see Mackey and Carter, 1995). As reported by ACIR (1995), over half of the states offer a preferential circuit breaker to the elderly, and of the states that offer homestead exemptions, 60 percent offer preferential treatment to the elderly. As the population ages, these credits and exemptions will become increasingly expensive for state and local governments.[19]

Finally, age has been found to be negatively related to housing demand, and reduced demand for housing may also reduce property tax revenues (Mankiew and Weil, 1989; Goodman, 1990). While there are many other factors at work, increased age by itself may translate into a lower demand for housing.[20] This occurs due to changes in income as individuals age, changes in the family structure of elderly households, and the movement of the elderly from their owner-occupied homes to other types of institutions. These changes mean that the elderly "consume" less housing, thereby reducing the amount of housing subject to the property tax. As more and more of the elderly move to smaller houses or retirement homes, the housing stock available to those looking to buy homes increases without increases in the property tax base.[21] The housing stock made available by the elderly moving to smaller homes is more likely to accommodate the relatively slow-growing home-ownership age group—those between 30 and 55. Absent property tax rate increases or repeal of exemptions, the property tax base simply does not grow without additional building.[22]

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[18] Mullins and Wallace (forthcoming), Musgrove (1982), and Nicols (1991) find that age is positively related to consumption of services and health-related products.

[19] Mackey and Carter (1995) summarize the effects of income, property, and sales tax treatment of the elderly. They show that relief programs for the elderly are widely available among states.

[20] McFadden (1994) concludes that the net interaction between changes in housing demand and the housing stock due to the aging of the U.S. population will be to lower the growth in the real value of the housing stock. This will decrease the growth in property tax revenue accordingly.

[21] Increases in the property tax base may occur due to statutes on reappraisals at the time of sale. However, this type of housing *turnover* does not add to the property tax base as quickly as new housing *construction*.

[22] The impact of the aging of the population on the housing stock is likely to be one of the smallest impacts discussed here, due to the number of other factors that affect housing stock, such as general economic conditions, lifespan, and the growing trend of grown children living with their parents.

The continued aging of the population therefore has significant potential to affect state and local governments budgets through potentially reduced growth in property, income, and sales tax bases. At the same time, the number of advocates for children's issues is likely to decline as the population ages and the elderly balance their demands for increased health and medical expenditures with long-term investment in children. Like many economic and demographic impacts, the impacts of the aging of the population are expected to be different across the country, with the South and West regions experiencing the greatest percentage growth in the number of elderly, while the Northeast and Midwest regions experience the greatest decreases in the school-age and working-age populations.[23]

Trends In Employment

The changes in the composition of employment and earnings tell an interesting story that also has the potential to affect state and local budgets significantly. Again, the general forecast for employment is for steady growth over the next 15 years. BEA projects that total employment growth will remain positive through 2010, although it will diminish throughout the forecast period. The aging of the population is expected to cause the reduced growth in total employment throughout the forecast period (Table 5).

TABLE 5

Average Annual Growth in U.S. Employment

Year	Employment Growth
1983-1988	3.17%
1988-1993	0.98%
1993-2000	1.73%
2000-2005	1.29%
2005-2010	0.99%
2010-2025	0.46%

Source: BEA, 1995.

In a now familiar pattern, it is the composition of employment and not necessarily the forecasted level of employment that has changed in a way that may influence state and local government budgets. The information presented in Table 6 shows a significant change in the composition of employment in the country from 1970 through 1993. Employment in the manufacturing sector has declined from 21.6 percent of all employment in 1970 to 13.2 percent in 1993. At the same time, service-sector employment has grown substantially over this period. Government employment has remained relatively steady over the period, declining 2.6 percentage points in total over 13 years.[24]

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[23] The aging of the population may also have repercussions for the cost of providing services. As the working-age population shrinks and labor becomes more scarce, wages may be bid up for private as well as government employers.

[24] Classification of these employment categories is, admittedly, not perfect. BEA's classification of service sector employment, for example, may include consulting jobs that are

TABLE 6
Composition of U.S. Employment
(percentage of total employment)

Year	1970	1980	1993
All Agricultural	4.3%	3.3%	2.8%
Mining	0.8%	1.1%	0.6%
Construction	4.8%	5.0%	4.9%
Manufacturing	21.6%	18.3%	13.2%
Transportation, Communication, and Public Utilities	5.3%	5.0%	4.7%
Wholesale Trade	4.6%	5.1%	4.7%
Retail Trade	15.0%	15.7%	16.7%
Financial, Insurance, and Real Estate	6.7%	7.7%	7.4%
Services	18.4%	21.6%	29.0%
Government and Government Enterprises	17.9%	16.5%	15.3%

Source: BEA, 1995.

How important are these changes in employment?[25] Some may argue that the level of employment is what is important in determining state and local government revenue. While this is true in part for revenue generated from consumption (sales and excise taxes, or user fees and charges) or personal income (individual income tax), there are a number of reasons why the changing structure of employment may have a significant impact on property taxes and on the business portion of sales taxes.

First, the service sector is less heavily invested in tangible property and capital than the manufacturing sector, causing a potential reduction in the amount of equipment and machinery subject to the property tax.[26] The movement toward contracted services also reduces the real property involved in the production process. Do these trends imply that there is less equipment and real property subject to the property tax as the economy moves away from manufacturing?

In fact, if we compare the real value of net capital stock (equipment and structures) per employee in the manufacturing and service sectors, we find that capital per employee is

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actually manufacturing jobs. Therefore, these data may overstate or understate the magnitute of the sectoral shift, but the reported change is so great that it is difficult to argue that the trend of employment away from manufacturing employment toward service employment has not been a strong one.

[25] It is also worth noting that other measures of economic activity show an increase in service-sector output and a decline in manfacturing output. For example, in 1980, the manufacturing sector represented 19.6 percent of total gross state product, while in 1990, it was 18.9 percent. The service sector represented 16.4 percent of total gross state product in 1980, increasing to 17.8 percent in 1990 (BEA, 1995).

[26] This is also pointed out in Snell (1993) and Fox (1995).

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almost five times larger in the manufacturing than the service sector.[27] This ratio has been very constant over time for the service sector, but, interestingly, it has grown in the manufacturing sector, especially over the last decade. In fact, the increase in capital stock per worker in the manufacturing sector has more than offset the decline in the number of manufacturing employees. The net result is a positive growth in real net capital stock over the past two decades. This growth rate, however, has shown a general decline since the late 1970s. In summary, while the shift to service-sector employment and output has not reduced equipment and structures overall, the growth has declined somewhat over the last 10 years. This may result in a slight reduction in the growth in property tax revenues from equipment and structures in the coming years.

Additionally, revenues from state and/or local property taxes based on inventories of companies will decline as an economy moves toward the service sector. Finally, since different forms of industry purchase different amounts of inputs, they probably pay different levels of sales taxes.[28] One might expect that, since service production uses fewer capital inputs, service-sector entities pay less in sales tax. However, given the rising cost of technology in all sectors, the value of inputs purchased by the service sector as well as by other sectors may actually be rising. One rough approximation of this effect can be estimated using the BEA data on fixed reproducible tangible wealth (BEA, 1994a). These data show that the average annual growth in the value of real net capital equipment used in the manufacturing sector has fallen from approximately 2.7 percent per year during the period 1973-1983 to 1.6 percent per year during the period 1983-1993. At the same time, the average annual increase in real net capital equipment used in the service sector fell from 6.6 percent per year to 6.4 percent per year for the same periods. Combining these two industries shows a reduction in the growth of the real net value of capital equipment from 3.6 percent per year to 2.8 percent per year over the same periods.

Using these numbers as approximations for taxable equipment purchases suggests that the value of equipment used in the service sector is growing faster than that in the manufacturing sector, and its growth rate has been relatively steady over the past 20 years.[29] This has helped to mitigate the decline in the overall growth rate of the real value of net capital equipment. These estimates suggest that there may be some decline in the growth of taxable business purchases, due both to the decline in the manufacturing sector, and the stabilization of the value of capital inputs in the service sector.

Overall, the forecasted growth in employment is expected to slow down after the year 2010. However, the change in the composition of employment away from manufacturing toward services may influence state and local government finances, through lower property

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[27] These calculations have been made using the BEA data on fixed reproducible tangible wealth (BEA, 1994a).

[28] Whether it is good economic policy or not, businesses do pay sales taxes. Fox (1995) estimates that up to one-third of sales taxes are paid by businesses through purchase of intermediate goods.

[29] These estimates are approximations because they do not provide the inforamtion needed to separate taxable and non-taxable capital stock.

tax revenue growth and potentially lower growth in sales taxes. This last issue has not received much attention, but is worthy of more detailed study.

Changes in Consumption

The final trend investigated here is the changing composition of consumption. The National Income and Product Accounts (NIPA) reports that consumers spent approximately 29.5 percent of all expenditures on non-housing services in 1970. By 1994, this figure had risen to 41 percent. Within the category of services, medical expenditures increased from 8 percent of all expenditures in 1960 to 13.4 percent in 1994. These changes in consumption patterns are certainly a function of the changing demographics of the United States, as mentioned above.[30] Actual forecasts of consumption by item are not readily available, but the movement toward service consumption has been prevalent since at least the early 1960s, and it is highly probable that this pattern will continue.

The threat to state and local budgets of this change in consumption patterns is that most state and local sales taxes do not tax goods for which consumption is growing: services and medical goods. The Federation of Tax Administrators (1994) conducted a survey of the tax treatment of over 164 services across the country.[31] The survey covered the tax treatment of these services in 1992 (including changes made through July 1992). The results of the survey show that most states tax less than half of the services included in the survey; Hawaii and New Mexico tax the largest portion of the services included in the survey. Among the other states that tax a relatively large percentage of services are Delaware, South Dakota, Washington, West Virginia, and Iowa. ACIR (1995) reports that virtually no state taxes medical services or prescription drugs.

Another way to investigate the effect of the changing composition of consumption on sales tax revenue is as follows: using average statutory state sales tax rates reported by Mikesell (1992), we can calculate the average revenue associated with each percentage point of the state general sales tax nationwide and compare this with total consumption expenditures. For example, in 1970, on average, each percentage point of state general sales tax produced about $4 billion in sales tax revenue nationwide, or approximately 0.62 percent of total personal consumption expenditures. In 1992, each percentage point of the tax generated about $21 billion in sales tax revenue, but this was only 0.51 percent of total consumption expenditures. Therefore, a given sales tax rate structure is capturing less of total expenditures in tax because a smaller share of consumption expenditures fall in the tax base.[32]

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[30] This consumption pattern shift is noted in Hurd (1993), Fox (1992, 1995), Mikesell (1992), and Snell (1993), among others

[31] The broad categories of these services (and the types of each service) include: utilities (16), personal services (20), business services (34), computer services (6), administrative/ amusement services (14), professional services (8), fabrication, repair, and installation services (19), and other services (47). For more information regarding the detail of these services, see the Federation of Tax Administrators (1994).

[32] Since this exercise does not hold sales tax bases constant, this could mean that non-taxable consumption is growing faster than taxable consumption naturally, or that states have

The net effect of the increase in the consumption share of non-taxable items is obvious—less growth in sales tax revenue over time. Not only do most states fail to tax the growing consumption groups, they do not tax some of the largest components of consumption, such as food and housing. Medical goods consumption as a share of total personal consumption itself increased by about 2.6 percent per year between 1970 and 1993. If we project this trend forward, by 2010 over 20 percent of consumption will be found in largely non-taxed medical spending alone.[33] While the consumption of taxable items will increase in nominal terms, the tax base as a proportion of total consumption will continue to shrink, and sales tax revenue will therefore grow more and more slowly over time.

NET IMPACT OF ECONOMIC AND DEMOGRAPHIC CHANGES ON STATE AND LOCAL BUDGETS

The information in Table 7 summarizes the economic and demographic trends discussed above and their potential impacts on state and local budgets. In most cases, the trends in these variables and their forecasted rates of growth suggest that while state and local governments are not immediately threatened with financial crises, over the longer run these trends will lower the elasticities of major revenue sources. This means that the growth in tax revenue will be less than the growth rate of total personal income. In other words, the elasticity of the tax may be declining. If expenditure demands grow proportionately with personal income, the reduced elasticity is important because it suggests that revenue growth will not keep pace with expenditure demand growth.[34] Also, these trends and forecasts indicate that the absolute growth in tax revenue may decline as well, thus exacerbating the difficulties that state and local governments will have in fulfilling expenditure demands.

The magnitude of change in these elasticities can be quite large. To illustrate this, consider the changes in the elasticity of tax revenues with respect to changes in personal income. The elasticity of a tax may be defined as the percentage change in tax revenue for a percentage change in personal income. The elasticity of any tax is comprised of two parts. The first part of the elasticity calculation is referred to as the rate elasticity—it calculates how much revenue changes as taxable income changes, and it is due to the tax rate structure only. If the statutory marginal tax rate is higher, revenue is higher; if the rate is lower, revenue is lower. The second part of the calculation is referred to as the base elasticity. It calculates the change in taxable income for a percentage change in total personal income. It is the base elasticity that is most vulnerable to changes in the economic and demographic trends discussed earlier.[35]

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excluded more and more goods from their sales tax base over time. Information presented in Fox (1992) and Gold (1991) suggested that the latter case is less likely to be prevalent across the country.

[33] Hurd (1993) projects a similar trend.

[34] This impact has been generally borne out in the literature; see Gramlich and Galper (1973), Bergstrom and Goodman (1973), and Snell (1993).

[35] Appendix C provides a specific example of the decline in base elasticity using actual U.S. data.

TABLE 7

Summary of Economic and Demographic Impacts on State and Local Budgets

Economic/ Demographic Variable	Trend	Forecast	Projected Changes in Composition	Anticipated Impact on State and Local Government Budgets
Personal income	Relatively stable growth in overall personal income in the past decade, with slight downturn in the early 1990s.	Stable growth in overall income of approximately 1.3 percent per year, slowly declining after the year 2000.	Short-term relatively stable growth in taxable versus non-taxable income. After 2000, the growth in potential taxable base declines.	Reduced taxable income base, significantly lower individual income tax elasticity.
Age	Slightly decreasing growth over the past decade, with a recent increase in the younger portion of the population.	Slower growth in the overall population, with the South and West regions witnessing the largest growth in population through the forecast period.	Continued growth of the elderly, decline in the growth of working and school-age population, especially after the year 2005.	Pressure from interest groups to reduce investment in children and to reduce financing mechanisms, including property taxes, slower real property growth slowing the growth of property taxes, and changes in consumption patterns which may reduce the growth of taxable sales.
Employment/ Production Concentration	Reduced growth in overall employment over the last decade. Significant reduction in manufacturing-sector jobs.	Continued decline in the general growth of employment, falling below 1 percent per year after the year 2000.	Continued decline in manufacturing employment with increases in service-sector employment. Significant reduction in growth of all employment as the population ages.	Potential decrease in the rate of capital investment, thus affecting property and sales tax bases.
Consumption	Slower growth in all consumption, especially for food.	Continued slow growth in general personal expenditures.	Change in the composition of expenditures toward services, with expected increase in the growth of service expenditures.	Increased consumption of largely non-taxed goods will lower the growth in sales tax revenue over time.

Individual Income Tax

As shown earlier, there has been a fundamental change in the composition of income, and the forecasts call for continued growth in retirement income and other transfer payments as a share of personal income. Since most state and local income tax bases exempt at least part of individuals' retirement income, these trends suggest that the percentage of personal income that remains part of state and local government income taxes bases has declined and will continue to decline. The BEA data presented earlier also show that after the year 2000, the potential tax base of the income tax will grow more slowly than it will in the immediate future. This suggests that the absolute growth in income tax revenue may also decline in the future.

One specific example may help to put this change into perspective. The state of Ohio relies heavily on its income tax, as do local governments within Ohio. Due to the change in the composition of income and the exemption of certain transfer payments, it is estimated that while the rate elasticity of Ohio's state income tax is relatively high—1.5—its base elasticity has fallen from 1.2 to 0.85 over the past two decades (Edwards and Wallace, 1994). Meanwhile, nationally, the growth in personal income continues to increase the demand for government services of various types, but state and local governments must respond with more slowly growing revenue sources.

Sales Taxes

A number of factors will influence both the elasticity of the sales tax as well as the absolute growth rate in sales tax revenue. First, the composition of consumption has moved toward services—especially medical services. While these trends are difficult to forecast, the aging of the population suggests that this composition trend will continue. Since few states tax services in general, and virtually no state taxes medical services, the base elasticity of the sales tax is expected to suffer. This is simply due to the evidence that the growing consumption groups do not fall in the sales tax bases of most state and local governments.

Second, there is some evidence that the decrease in the manufacturing sector will yield smaller increases in taxable business consumption. As discussed earlier, one measure of the impact of the manufacturing/service-sector shift suggests that there may be a decrease in the growth of potentially taxable inputs from these two sectors. While this issue needs further study, it appears that this shift may reduce the elasticity of the sales tax, as well as the absolute growth in sales tax revenues from taxes on business inputs from these two changing sectors.

Finally, Gregory (1990) suggests that sales tax purchases are more likely to come from wage and salary income than from other forms of income.[36] This conjecture has intuitive appeal because income from retirement savings and income maintenance programs may be less liquid, or the purchases for which they can be used may be more limited. If this is true, then the growth in transfer payments that is expected to continue from the year 2000 would

[36] This is also summarized in Snell (1993).

also reduce both the elasticity and the absolute growth of sales tax revenues. This is one of many issues that warrants further study.

Property Taxes

The effects of the demographic trends on the property tax base are less clear-cut than the effects on income and sales tax bases. There is some evidence that the aging of the population will lead to smaller increases in property tax base growth, due to the elderly moving out of residential homes. However, this impact is likely to be very small and very gradual, given the limited information that we have on the elderly's consumption of housing, and the great number of other factors that influence the growth of the housing stock.

We did present some evidence that the manufacturing/service-sector shift may reduce the elasticity of the property tax. The growth in the value of the net capital stock in the manufacturing and the service sector has declined somewhat since the late 1970s. This may result in lower absolute growth in property tax revenue in the future. A growing trend that exempts manufacturing equipment and inventories from the property tax has probably made this trend more costly (see Sjoquist, 1994).

It is very likely that other forms of state and local government revenue are also affected by the economic and demographic trends discussed in this report; however, they are not discussed here. The final section of this report discusses the options available for state and local governments to deal with potential reductions in tax bases caused by the economic and demographic changes discussed.

OPTIONS FOR STATE AND LOCAL GOVERNMENTS

While state and local governments are not helpless against these trends, politicians face some difficult choices. It is always difficult to undo special exemptions, credits, and the like, and the demands of many different constituencies must be weighed all together. At the same time, state and local governments are in fierce competition over attracting new businesses, which dampens support for increasing taxes.[37] However, from the viewpoint of long-term fiscal stability, it may be in the best interests of all to slow or stop the trend of tax-base erosion through state and local revenue-source "giveaways," not for the purpose of increasing taxes, but simply to put revenue growth on a higher growth path. If such changes are not made, the growth of real revenue will decline unless adjustments in the rates are made. Again, this is due to the structural changes in the economy that cause a reduction in the elasticity of major revenue producers.

State and local governments may be tempted to make "quick fixes" to their revenue structures to make up for revenues lost due to base erosion. Often, these fixes are adjustments in tax rates, and they are made with little regard to the overall tax structure and the changes in the economic base that caused a problem in the first place.[38] Ignoring the

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[37] For an overview of the issue of interstate competition, see Kenyon and Kincaid (1991).

[38] This issue is discussed in Bahl (1994), Commission to Study the Ohio Economy and Tax Structure (1994), and Snell (1993).

structural problems that could exist with the revenue structure and instead increasing tax rates compromises the long-term usefulness of the revenue structure. Ad hoc increases in tax rates serve to reduce the competitiveness of a state and/or locality, and typically reduce economic efficiency, alter the equity goals of a revenue system, and encourage tax evasion. What is just as important, increased rates do not guarantee that the growth in revenue will keep up with the growth in income for more than a few years, since the structural mismatch between the revenue base and the economy may continue to exist.

Instead of quick-fix solutions, state and local governments need to study structural changes in their revenue systems that address the important changes in the economy. This way, state and local governments can strengthen the long-term usefulness of their revenue systems by adjusting and, in most cases, broadening their revenue bases to incorporate growing sectors of the economy. Such studies will no doubt point to the following options and issues for state and local governments to adjust their revenue structures in order to prevent further revenue-base erosion. Some of these options will be more appropriate and viable to some jurisdictions than others, but they serve to present a basic, comprehensive menu of options for discussion:[39]

- Reduce the retirement income exclusion, or stop the growth of the expansion of retirement income exclusions.
- Eliminate or reduce property tax exemptions and credits, or redesign such exemptions to consider the equity of exemptions.
- Eliminate the preferential property tax treatment for manufacturing inventories and equipment.
- Expand the sales tax base of state and local governments to include more services and, possibly, food if it is not currently taxed.
- Expand the use of user fees and charges to capitalize on personal income growth.
- Investigate the feasibility of privatization of government services in order to reduce potential expenditure-side stress.

There are currently a number of giveaways that are especially costly to state and local government budgets. These include the age-related income exemptions for state and local income taxes, as well as various forms of property tax exemptions and credits. The growth in these preferences is a difficult trend to stop, as states appear to compete for the support of the elderly population through income and property tax exemptions (Edwards and Wallace, 1994). However, these will only become more expensive policies in the future. In particular, state and local governments should consider the size of the retirement/Social Security exemptions that they allow for their income tax bases.

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[39] While there are certainly other options as well, the ones presented here provide an overview of those that address the issues discussed in this report. In particular, the globalization of the economy may call for alterations in the use and structure of the state corporate income tax (see Martinez and Grace, 1994), and the growth of the telecommunications industry implies its own set of complications regarding state and local taxation (see McHugh, 1994). These issues, and options to address them, are not discussed here.

From the property tax side, retiree exclusions and exemptions are often made for equity purposes. Governments may want to do more means-testing with regard to these exemptions and exclusions so that equity can be upheld, while preserving some of the growth in the tax base.

State and local governments are in a perfect position to take advantage of the consumption trend discussed in earlier sections. The time is right to examine the taxation of services of all types. Taxation of most services is justified on equity as much as revenue grounds. For example, why should a family pay tax on clothing but not on dry-cleaning services? Some argue that the taxation of large service expenditures—such as those for accountants, lawyers, and doctors—would be too difficult and may be inequitable. However, this argument has not been made in a compelling way.[40]

Taxation of services would yield different levels of revenue benefits to different states. For example, it has been estimated that full taxation of services in Georgia would yield approximately $1.2 billion per year, or approximately 35 percent of total current sales tax revenue. Local governments using the same base would also see a similar percentage increase. In Ohio, significant taxation of services would yield approximately $1.6 billion in revenue, or over 35 percent of the state's sales tax revenue for 1994. [41]

Expansion of the sales tax base to food has been a controversial issue in most all states (see Fox, 1992). The typical argument against taxation of food is that such a tax would be regressive in nature. However, taxation of staples such as food and clothing adds stability to tax bases, and as such may be desirable from the standpoint of long-term growth and stability of state and local budgets. Also, exempting food from the sales tax base gives a tax benefit to high-income individuals as well as low-income individuals. The potentially regressive nature of a sales tax on food can be virtually eliminated by way of an income tax credit.[42] Currently, 20 states at least partially tax food (ACIR, 1995), so it is truly a viable option for stabilization of the sales tax base.

As noted by Sjoquist (1994), there has been an increasing trend to exempt manufacturing inventories and equipment from the property tax in an attempt to prevent further decline in the manufacturing sector. Wasylenko (1994) finds that these types of tax incentives have little impact on reversing the trend of decline of the industry. In the short term, such exclusions help to erode property tax bases even further. By eliminating such tax preferences, governments may be able to stabilize some of the growth in their property tax bases.[43]

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[40] For a more detailed discussion, see Fox (1995).

[41] The state of Ohio has been adding services to its sales base over the last decade.

[42] See Fox (1992, 1995) for a discussion of the pros and cons of such a credit.

[43] Such a measure would probably be more helpful in a revenue sense in the short run rather than the long run, since the trend in the decline of the manufacturing sector is likely to continue. However, equal treatment of industries is generally viewed as a basic tenet of tax policy (Musgrave and Musgrave, 1984), and as such, the elimination of such preferences may be viewed as a movement toward a more efficient tax system in general.

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State and local governments are also in a position to look closely at their use of user fees and charges. Continued growth in personal income will lead to a continued growth in demand for public services. Fees for services such as roads, airports, public education, and other public services may provide a steady revenue source for state and local governments. While each should be examined with respect to a community's views on the equity of such fees, there is significant room for expanding the use of such revenue instruments.

Finally, there are expenditure-side alternatives for dealing with the expected impacts of these economic and demographic variables. While it may not necessarily address the demographic trend issues directly, privatization may provide an additional mechanism for dealing with budgetary pressures due to demographic trends. The issue of privatization of services has been gaining interest among state and local governments. Privatization should not be viewed as the answer to all fiscal problems, but it does deserve consideration on a government-by-government basis. Consolidation of services by use of special districts may also alleviate some fiscal pressures by taking advantage of economies of scale in the production of public services.

To summarize, the current economic and demographic trends and their forecasts suggest that state and local governments will be faced with slower-growing revenue sources, while public-service demand shifts its focus toward the elderly. Without some fundamental changes to the major revenue instruments (income, sales, and property taxes), these trends will cause trouble for governments in the not-too-distant future. However, preventing further erosion of these revenue bases and supporting expansion of the bases will put state and local governments on a higher revenue growth path without raising tax rates. Additionally, state and local governments should be encouraged to investigate further use of user fees and charges, as well as privatization of services.

REFERENCES

Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism* (Washington, DC: ACIR, selected years).

Auerbach, Alan J., Laurence J. Kotlifkoff, Robert P. Hagemann, and Giuseppe Nicoletti, "The Economic Dynamics of an Aging Population: The Case of Four OECD Countries" (Washington, DC: OECD, 1989).

Bahl, Roy, "The Georgia Economy: Implications for Fiscal Reform," Joint Study Commission on Revenue Structure, State of Georgia, Policy Research Center, Georgia State University, July, 1994.

Bergstrom, Theodore C., and Robert P. Goodman, "Private Demand for Public Goods," *American Economic Review*, vol. 63 (1973), pp. 280-296.

Case, Karl E., and Robert J. Shiller, "Forecasting Prices and Excess Returns in the Housing Market," *AREUEA Journal*, vol. 18, no. 3 (1990), pp. 253-273.

Commission to Study the Ohio Economy and Tax Structure, "Taxation and Economic Development in Ohio: A Blueprint for the Future," Final Report, Policy Research Center, Georgia State University, December, 1994.

Congressional Budget Office, "The Economic and Budget Outlook: An Update" (Washington, DC: Congressional Budget Office, 1995(a)).

Congressional Budget Office, "The Economic and Budget Outlook: Fiscal Years 1996-2000" (Washington, DC: Congressional Budget Office, 1995(b)).

Duchi, Mary L., "Ohio's Economic and Demographic Structure," Commission to Study the Ohio Economy and Tax Structure, Policy Research Center, Georgia State University, November, 1994.

Edwards, Barbara, and Sally Wallace, "Ohio's State and Local Income Taxes: Analysis and Options," Commission to Study the Ohio Economy and Tax Structure, Policy Research Center, Georgia State University, November, 1994.

Executive Office of the President, Office of Management and Budget, "The Fiscal Year 1996 Budget: Midsession Review" (Washington, DC: U.S. Government Printing Office, 1995 (a)).

Executive Office of the President, Office of Management and Budget, "The Fiscal Year 1996 Budget" (Washington, DC: U.S. Government Printing Office, 1995 (b)).

Federation of Tax Administrators, *Sales Taxation of Services: An Update* (Washington, DC: Federation of Tax Administrators, 1994).

Fox, William, "Ohio's Sales Taxes: Current Condition and Policy Options," Commission to Study the Ohio Economy and Tax Structure, Policy Research Center, Georgia State University, November, 1994.

BEST COPY AVAILABLE

Fox, William, ed., *Sales Taxation: Critical Issues in Policy and Administration* (Westport, CT: Praeger, 1992).

Gold, Steven, "Changes in State Government Finances in the 1980s," *National Tax Journal*, vol. XLIV, no.1 (1991), pp. 1-20.

Gold, Steven, "The State Government Response to Federal Income Tax Reform: Indications from States that Completed Their Work Early," *National Tax Journal*, vol. XL, no. 3 (1987), pp. 431-444.

Goodman, Allen C., "Demographics of Individual Housing Demand," *Regional Science and Urban Economics*, vol. 20 (1990), pp. 83-102.

Gregory, Warren C., "Solving Michigan's Budget Deficit: Opportunity from Crisis" (Lansing, MI: Michigan State House of Representatives Fiscal Agency, 1990).

Gramlich, Edward M., and Harvey Galper, "State and Local Fiscal Behavior and Federal Grant Policy," *Brookings Papers on Economic Activities* (1973), pp. 15-58.

Hurd, Michael D., "The Effect of Demographic Trends on Consumption, Saving, and Government Expenditures in the U.S.," *National Bureau of Economic Research Working Paper* No. 4601 (Cambridge: NBER, December 1993).

Internal Revenue Service, *Statistics of Income Bulletin*, Spring 1995.

Joint Center for Housing, "The State of the Nation's Housing 1995" (Cambridge: Harvard University, 1995).

Mackey, Scott, and Karen Carter, "State Tax Policy and Senior Citizens: Property, Sales, and Death Taxes," *State Tax Notes*, April 3, 1995, pp. 1405-1425.

Mankiw, N. Gregory, and David N. Weil, "The Baby Boom, The Baby Bust, and the Housing Market," *Regional Science and Urban Economics*, vol. 19 (1989), pp. 235-258.

Martinez, Jorge, and Martin Grace, "Business Taxation in Ohio: General Franchise Tax and Taxes on Financial Institutions," Commission to Study the Ohio Economy and Tax Structure, Policy Research Center, Georgia State University, November, 1994.

McFadden, Daniel, "Demographics, the Housing Market, and the Welfare of the Elderly," in *Studies of the Economics of Aging*, David Wise, ed. (Chicago: University of Chicago Press, 1994), pp. 225-290.

McHugh, Richard, "The Taxation of Telecommunications in Ohio," Commission to Study the Ohio Economy and Tax Structure, Policy Research Center, Georgia State University, October, 1994.

Mikesell, John, "State Sales Tax Policy in a Changing Economy," *Public Budgeting and Finance*, vol. 12, no.1 (1992), pp. 83-91.

Morrison, Peter A., "Changing Demographics: What to Watch For," *Business Economics*, July 1987, pp. 5-8.

Mullins, Daniel R., and Sally Wallace, "Changing Demographics and State Fiscal Outlook: The Case of Sales Taxes," *Public Finance Quarterly*, forthcoming.

Mullins, Daniel R., and Sally Wallace, "Demographic and State Fiscal Pressure: Escalation or Relaxation?," paper presented at the Southern Economic Association Meetings, 1992.

Musgrave, Richard, and Peggy Musgrave, *Public Finance in Theory and Practice* (New York: McGraw-Hill, 1984).

Musgrove, Peter, *U.S. Household Consumption, Income, and Demographic Changes: 1982-2025* (Baltimore: Johns Hopkins University Press, 1982).

Nicols, C.J., "Aggregate Consumption Behavior without Exact Aggregation," *Canadian Journal of Economics*, vol. 23, no. 8 (1991).

Ratajczak, Donald, *Forecast of the Nation, 1995 II-1997 I* (Atlanta, GA: Economic Forecasting Center, Georgia State University, May 1995).

Sjoquist, David, "Real Property Taxation in Ohio: Analysis and Policy Options," Commission to Study the Ohio Economy and Tax Structure, Policy Research Center, Georgia State University, September, 1994.

Snell, Ronald, ed., *Financing State Government in the 1990s* (Denver and Washington, DC: National Conference of State Legislators, National Governors' Association, 1993).

State Budget & Tax News (Columbus, OH: State Policy Research, Inc., various issues).

U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, p-25, p-60 series (Washington, DC: U.S. Government Printing Office, 1994).

U.S. Department of Commerce, Bureau of Economic Analysis (BEA), *BEA Regional Projections*, computer-readable dataset (Washington, DC: U.S. Government Printing Office, 1995).

U.S. Department of Commerce, Bureau of Economic Analysis (BEA), *Fixed Reproducible Wealth in the United States*, computer-readable dataset (Washington, DC: U.S. Government Printing Office, 1994(a)).

U.S. Department of Commerce, Bureau of Economic Analysis (BEA), *Regional Economic Information System*, computerreadable dataset (Washington, DC: U.S. Government Printing Office, 1994(b)).

U.S. Department of Commerce, Bureau of Economic Analysis (BEA), *Survey of Current Business*, vol. 75, no. 6, June 1995.

U.S. Department of Commerce, Bureau of Economic Analysis (BEA), *National Income and Product Accounts of the United States 1959-1988* (Washington, DC: U.S. Government Printing Office, 1991).

U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditures* (Washington, DC: U.S. Government Printing Office, various years).

Wasylenko, Michael, "The Role of Fiscal Incentives in Economic Development: How Ohio Stands Relative to Its Competitor States," Commission to Study the Ohio Economy and Tax Structure, Policy Research Center, Georgia State University, September, 1994.

Wise, David, ed., *Further Topics in the Economics of Aging* (Chicago: University of Chicago Press, 1994).

APPENDIX A: BEA Classification of States

New England:
- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont

Southeast:
- Alabama
- Arkansas
- Florida
- Georgia
- Kentucky
- Louisiana
- Mississippi
- North Carolina
- South Carolina
- Tennessee
- Virginia
- West Virginia

Mideast:
- Delaware
- District of Columbia
- Maryland
- New Jersey
- New York
- Pennsylvania

Southwest:
- Arizona
- New Mexico
- Oklahoma
- Texas

Great Lakes:
- Illinois
- Indiana
- Michigan
- Ohio
- Wisconsin

Rocky Mountain:
- Colorado
- Idaho
- Montana
- Utah
- Wyoming

Plains:
- Iowa
- Kansas
- Minnesota
- Missouri
- Nebraska
- North Dakota
- South Dakota

Far West:
- California
- Nevada
- Oregon
- Washington

APPENDIX B: Bureau of Census Classification of States

Northeast

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Pennsylvania
- Rhode Island
- Vermont

Midwest

- Illinois
- Indiana
- Iowa
- Kansas
- Michigan
- Minnesota
- Missourri
- Nebraska
- North Dakota
- Ohio
- South Dakota
- Wisconsin

South

- Alabama
- Arknasas
- Delaware
- Florida
- Georgia
- Kentucky
- Louisiana
- Maryland
- Mississippi
- North Carolina
- Oklahoma
- South Carolina
- Tennessee
- Texas
- Virginia
- Washington, DC
- West Virginia

West

- Alaska
- Arizona
- California
- Colorado
- Hawaii
- Idaho
- Montana
- Nevada
- New Mexico
- Oregon
- Utah
- Washignton
- Wyoming

APPENDIX C

The data in Table B-1 demonstrate how significant the decline in the base elasticity may be. If we define taxable income as the sum of wage and salary income, interest, rents, dividends, and proprietors' income, we can estimate how total taxable income in the United States as a percentage of total personal income changes over time. This impact will actually differ by state, since the definition of taxable income differs among states. However, the more a state excludes transfer payments, the more pronounced this impact will be. As shown in the table, our definition of taxable income has fallen from 83.48 percent of personal income to 81.22 percent of personal income.

TABLE B-1
Example of Erosion of U.S. Income Tax Base
(in millions of dollars)

Income	1980	1993
Personal Income	2,259,006	5,361,968
Taxable Income	1,885,837	4,354,923
Taxable Income as a Percentage of Personal Income	83.48%	81.22%

Source: Author's calculations of BEA (1994(b)).

THE FINANCE PROJECT

The Finance Project is a national initiative to improve the effectiveness, efficiency, and equity of public financing for education and other children's services. With leadership and support from a consortium of private foundations, The Finance Project was established as an independent nonprofit organization, located in Washington, DC. Over a three-year period that began in January 1994, the project is undertaking an ambitious array of policy research and development activities, as well as policymaker forums and public education activities.

Specific activities are aimed at increasing knowledge and strengthening the nation's capability to implement promising strategies for generating public resources and improving public investments in children and their families, including:

- examining the ways in which governments at all levels finance public education and other supports and services for children (age 0-18) and their families;
- identifying and highlighting structural and regulatory barriers that impede the effectiveness of programs, institutions, and services, as well as other public investments, aimed at creating and sustaining the conditions and opportunities for children's successful growth and development;
- outlining the nature and characteristics of financing strategies and related structural and administrative arrangements that are important to support improvements in education and other children's services;
- identifying promising approaches for implementing these financing strategies at the federal, state and local levels and assessing their costs, benefits, and feasibility;
- highlighting the necessary steps and cost requirements of converting to new financing strategies; and
- strengthening intellectual, technical, and political capability to initiate major long-term reform and restructuring of public financing systems, as well as interim steps to overcome inefficiencies and inequities within current systems.

The Finance Project is expected to extend the work of many other organizations and blue-ribbon groups that have presented bold agendas for improving supports and services for children and families. It is creating the vision for a more rational approach to generating and investing public resources in education and other children's services. It is also developing policy options and tools to actively foster positive change through broad-based systemic reform, as well as more incremental steps to improve current financing systems.

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